

Title (en)  
PUSH-UP DEVICE

Title (de)  
PUSH-UP-VORRICHTUNG

Title (fr)  
DISPOSITIF DE REMONTÉE

Publication  
**EP 2447102 A4 20130123 (EN)**

Application  
**EP 10792176 A 20100624**

Priority  
• JP 2010060783 W 20100624  
• JP 2009151050 A 20090625

Abstract (en)  
[origin: EP2447102A1] A lock device includes a cam portion including a stationary-side cam; a rotor including a movable-side cam; a slide groove; a slide projection; an engagement projection; and a lock groove, in which the movable-side cam is disengaged from the stationary-side cam, so that the rotor rotates so as to allow the engagement projection that has been fitted in the lock portion to disengage from the lock portion. The urging device includes a spring, and a sleeve inserted to pass through a lower-side rod portion, positioned between the rotor and the spring, and also restricting a movement of the rod in a sliding direction in a lock position of the lock device (for example, a lock groove and an engagement projection, and the like).

IPC 8 full level  
**B60K 15/05** (2006.01); **E05C 19/02** (2006.01); **F16B 7/14** (2006.01)

CPC (source: EP KR US)  
**B60K 15/04** (2013.01 - KR); **B60K 15/05** (2013.01 - EP KR US); **E05C 19/02** (2013.01 - KR); **E05F 1/105** (2013.01 - EP US); **B60K 2015/053** (2013.01 - EP US); **B60K 2015/0561** (2013.01 - EP US); **B60K 2015/0576** (2013.01 - EP US); **E05Y 2201/22** (2013.01 - EP US); **E05Y 2201/221** (2024.05 - EP); **E05Y 2201/232** (2013.01 - EP US); **E05Y 2201/422** (2013.01 - EP US); **E05Y 2400/3013** (2024.05 - EP US); **E05Y 2900/534** (2013.01 - EP US)

Citation (search report)  
• [A] EP 2017112 A1 20090121 - NIFCO INC [JP] & JP 2007290573 A 20071108 - NIFCO INC  
• [A] WO 2008031814 A1 20080320 - SALICE ARTURO SPA [IT], et al  
• [A] DE 19650594 A1 19980618 - BAYERISCHE MOTOREN WERKE AG [DE]  
• See also references of WO 2010150858A1

Designated contracting state (EPC)  
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